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JUNE 26, 1922

Issued Weekly

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VOLUME XII

Number 26

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Pumps for hydraulic rams
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JUNE 26, 1922

AVIATION

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Vol. XII

JUNE 26, 1932

No. 95

The Function of Air Power

All those who take an intelligent interest in questions of national defense and who, for this reason, favor the building up of a strong National Air Force as well as of a genuine aeronautical academy to support this service, will read with interest two letters reproduced in this issue. They were sent to the President of the Senate by the Secretaries of War and of the Navy, respectively, in response to a Senate Resolution in regard to the feasibility of establishing an Academy of Aeronautics, its possible location at West Point or Annapolis, and of the convenience of an annual or a Navy year into a government aircraft factory.

It might be well to state that we do not take sides as to the merit of these propositions, indeed we rather feel that the creation of an Academy of Aeronautics would be premature without the existence of a National Air Force, and we do not say any word as an additional government aircraft factory while McCook Field and the Naval Aircraft Factory are functioning.

The replies of the Secretaries of War and Navy are both decidedly opposed to the scheme of an aeronautical academy; the War Department finds it inadvisable because the Air Service already has special training schools, while the Navy Department fears that it would be "most detrimental to the Navy's interests and to the purpose for which the Navy equips its vessels." And both departments are cordially agreed that they are quite sufficient unto themselves insofar as aviation is concerned, so appears from the following excerpts which have all the air of extensibility:

"The Air Service of the United States Army, as presented in the Act of June 1908, is sufficient for military needs." (War Department.)

"Whatever the Navy needs used in training is best taken care of by the Navy itself." (Navy Department.)

These then we have the whole situation in a nutshell. The clearest advocate of a single air force could not have expressed upon these documents an air effort to show that soldiers and sailors still think of the air force in terms of military and naval warfare instead of considering aerial warfare from an aeronautical point of view. This was precisely the reason which prompted the British government during the war to create an independent air ministry with its air staff, for until then "soldiers and sailors would continue to think of the air force in terms of their own service and would not pursue its development as an independent force outside the purposes with which it was associated and for which they deemed that it should be employed." (Air Chief-Chief in the House of Lords.)

In other words, the Army and the Navy both are willing and eager to employ aviation as an arm of the services, for working in the first place, and secondarily for attack against aerial, terrestrial and naval objectives because they realize

that the new arm immensely increases their fighting efficiency. But that is just as far as they are interested in aviation. They are not at all keen on developing aerial warfare in its logical conclusion, that is, to create an aerial standing force with its own staff, which sooner or later must become the first line of defense of the nation. Their attitude is, with all its selfishness, extremely human—but it is a highly dangerous one, too, in that it hurls the nation into a false sense of security, unwarmed by well established facts.

The next war will open up aerial bombing raids, probably at night, of a magnitude unknown of during the last war, and long before the services and armies will have established contact. These attacks will not be directed separately by armies and armies according to whether the objective is a target or an island town; the objectives will form in their totality a strategic program elaborated by an aerial staff for the purpose of supplying an air command of the air. This means not only destroying the opponent's air force but also the wiping out of his aeronautical base and manufacturing plants.

Thus aerial strategy will decide in a day or two the initial mastery in the struggle, and perhaps the outcome of the war. Can we truthfully say that our present air services, which primarily answer military and naval needs, are capable of defending the United States against attack by an air force directed by an aerial staff which is unbacked by military or naval frontiers in conducting its objectives?

The Berliner Helicopter

THE report, authenticated by photographs which dispel any doubt, that the latest Berliner helicopter has actually flown in a horizontal plane, will come as cheering news to those whose faith in the ultimate success of the direct lift machine has not been shaken by the criticisms of the task.

As we said some time ago, several helicopters have lifted off the ground and have hovered, but an authentic instance of a controlled horizontal flight was yet lacking. Owing to the methods efforts of Bertha Berliner, the inventor, and of his son, Henry, who tests the older Berliner's machine in flight, we have some considerably nearer the solution of the helicopter problem. This problem is primarily one of stability, and secondarily one of propulsion. To solve the former Mr. Berliner devised a series of vertical vanes, controlled by the pilot, whereby a given portion of the propeller disk area can be blanketed, which introduces a rotating couple. For horizontal propulsion a separate propeller, inclined to the path of flight, is mounted aft on the fuselage, and is apparently gear-driven from the engine. The entire arrangement is very much like an experimental machine and further trials of the Berliner helicopter will be watched with interest.

Foreign News

France.—The Associated Press reported on June 8, that an autonomous air ministry will be created within the Ministry of War under a bill introduced in the Chamber of Deputies by war minister Maginot. The measure calls for the appointment of forty colonels, forty-five lieutenant colonels and 140 majors, these to be placed under the jurisdiction of Laurent Eynac, under secretary of state for aeronautics. In addition, three colonels, ten lieutenant colonels and fifteen majors would be taken over from the cavalry units. Official figures given out by M. Maginot show that in 1921 there were 92 airplane accidents in the French aviation service, 72 pilots and mechanics meeting death.

The traffic of the Bourget airport (Paris) is increasing considerably, according to *La Journée Industrielle* of April 9-10. In March, 1922, there were recorded 315 airplanes, carrying 846 passengers and 21,908 kilos of merchandise. The corresponding figures for March, 1921, were 250 airplanes with 681 passengers and 8,725 kilos of merchandise.

Great Britain.—New regulations for securing greater safety on the Paris-London air route have been accepted at a meeting of French and British pilots. They agreed to the outward and inward routes being separated by a distance of approximately 10 km. (6¼ miles). This arrangement will add slightly to the mileage of the route from London to Paris, and necessitate some change in the ground arrangements, including the provision of supplementary landing grounds for cases of emergency. The line from Paris to London will be via Beauvais, Calais, and Dover, while the return journey will be by Folkestone and Boulogne and then well to the right of the small hills at Cambrins and Beuvais.

On May 7, the first of the DH34 machines belonging to the Instone Air Line made the inaugural flight from London to Brussels and back.

One of the regular pastimes now for pilots flying between London and Paris on the British machines equipped with wireless is to ring one another up and have a chat in the air.

Czechoslovakia.—Aerial passenger and mail service between Prague and Vienna will soon be opened it was reported to the Department of Commerce a few days ago. Planes will leave Prague on Monday, Wednesday and Friday at 1:30 p. m., being due at Vienna at 3:30 p. m. From Vienna planes will leave for Budapest at 4 p. m., making the trip in 1 hr. 40 min. Planes will leave Budapest on Tuesday, Thursday and Saturday at 6:45 a. m., and are due to arrive at Vienna at 8:30 a. m. Leaving Vienna at 9 a. m. they are scheduled to arrive at Prague at 11 a. m. The fare from Budapest to Prague is said to amount to 770 Czechoslovakian crowns.

Brief Trade Notes

Vincent Astor's new Loening Air Yacht will be delivered to him within the next three weeks, and Harold Vanderbilt's machine of the same design will be ready for the owner early in July.

Gordon Thorne, Chicago sportsman, recently purchased a Curtiss Seagull. The Chicago Tribune now has a Curtiss machine for gniek news gathering and photographic purposes, in charge of Morrow Krum, its aviation editor.

The Fairchild Aerial Camera Corp. of New York, is making an aerial map of Newark, N. J.

Walter T. Varney of San Francisco is distributing aerial time tables of his commercial operations, 5 cents for ¼ air mile between San Francisco, Los Angeles and Salt Lake City.

Separate orders have recently been placed by the Air Service with the Lawrence Sperry Aircraft Corp. of Farmingdale, L. I., for five and twenty "Messenger" type planes, respectively.

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